EDGE OF THE SEA: KHALEEJ SALMAN BEACH DEVELOPMENT

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Abstract

Khaleej Salman Beach is one of the natural and beautiful beaches at Jeddah but has limited activities on its side. This study proposes a development project at Khaleej Salman Beach in making Jeddah more suitable environment for tourism, living, holding huge events and for development in different way of life. Some similar case studies were reveals the close concept of the project. The space program of the proposed project was defined according to the selected site. The space program is located for six main zones namely activity building, events building, amenities, administration building, shelter unit and services unit. The selected site was evaluated based on the criteria of the accessibility, utilities, security and safety, visual quality, future development, demographic pattern and its surrounding. The selected site for this project is at Khaleej Salman beach, near to Prince Salmon Palace. This project creates a vibrant outdoor urban environment and offers the community exciting recreational facilities and adding some beauty to Jeddah sea line.

Keywords – Khaleej Salman Beach, Coastal, Tourism, Natural, Recreational Facilities

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INTRODUCTION

The coastal zone is an environment of high dynamic complexity that is important in the environmental, socioeconomic and cultural contexts [1]. Tourism is developing in form of exploitation natural resource, which prioritizes on tour interest services for human satisfaction [2]. An undisturbed or contaminated natural place always the privilege choices for visitor to experience the nature. The development and preservation at the natural resources are the challenges to build tourism industry. The management must maximize the recreational use and tourism benefits without sacrificing environmental values. Therefore, the development must be adapted to the values of each beach and to its users [3]. Education may be a great ally increasing environmental awareness and changing users’ expectations when experience the conflict between recreational interests and natural value [3].

Coastal areas are transitional areas between the land and oceans, which is a specific potential location for recreational purpose due to its weather condition, landscape and availability of some mineral water resources [4]. The Corniche at Jeddah attracted most visitors from inland cities because of the long pedestrian area by the Red Sea. Khaleej Salman Beach attracts the population for psychological comfort, which is away from the noise and free from interference of human beings in place [5]. Kaleej Salman is an attractive place for the youth or for the Jeddah families to spend a whole day in it or even more than one day, although it doesn’t have the required pleasure facilities. Therefore, this study proposes a development for more comfortable place for having entertainment and become a focal point in north Jeddah.

CASE STUDIES

This study considered three activity centers, from Singapore, Bulgaria and Dubai for the case studies. This three activity center is dedicated designed for sport, sociability, entertainment and leisure purpose. All the activity centers are designed with unique landscape and they are:

- a. Resort World Sentosa, Singapore
- b. Collider Activity Center, Bulgaria
- c. Al-Jumeirah residential beach, Dubai

Resort World Sentosa, Singapore

The resort of Sentosa located to the east and the central zone with a host of accommodation and entertainment facilities (Figure 1). The West Zone’s unique take on leisure is to create a wholly aquatic-themed experience. It presents both wet and dry leisure facilities, including the Marine Life Park which comprises a waterpark and the world’s largest aquarium and is connected to the Maritime Experiential Museum and two distinctive hotels. Meandering walks divide West Zone, extending from the open spaces of Central Zone and ending where the Beach Villas and ESPA at Resorts World Sentosa are located. One of the planning strategies is to condense the more public entertainment activities towards the more accessible areas of the site [6].

Marine Life Park offers two key attractions at its ‘wet experience’ and ‘dry experience’. The former is Adventure Cove Waterpark which is both an educational and leisure attraction. The Adventure River lets visitors float down a meandering river through fourteen different settings including a tropical garden, a mysterious grotto and an underwater tunnel [6].

Figure 1. Zoning of Resort world Sentosa [7]
Collider Activity Center, Bulgaria

The project proposal for the Collider Activity Center has two primary objectives which are visual identity and vitality (Figure 2). The new Collider Activity Center is thought as a place of entertainment, sports and sociability. Since it is placed in a context of on-going evolution, their version of the activity center aims to be the driving force of the transformation of the whole district of Sofia, Bulgaria by becoming a symbol for the entire city [8].

The siding in white metal striped panels highlights the changes of attitude of the different faces, suggesting the idea of lightness, especially in areas in which it is dematerialized into micro perforated panels [8].

Al-Jumeirah residential beach, Dubai

Al Khatib Cracknell is the project designer of for Jumeirah Beach Residence (JBR) who has undertaken the master planning and urban design work for the project. Cracknell were appointed as public realm and landscape consultants for Jumeirah Beach Residence (JBR) (Figure 3). ‘The Walk’ and led the design from vision and concept through to construction. A dynamic public realm design successfully achieved the vision to connect 300 visitors, linked to full cultural, civic and community programmes. The concept centred on linking a series of visual experiences along The Walk. This was achieved through a mix of landscape elements such as small water features to large iconic fountains, and a series of open piazzas for entertainment and weekend markets. A rich paving pattern and bespoke furniture further created a unique character to this development [10].

SPACE PROGRAM

A close estimation of the areas required to design the buildings is important in order to suit the total gross area of this project. The space program is specified for activity building, events building, amenities, administration building, shelter unit and services unit. The activity building consists of seven sub-zones namely climbing and skating area, spa, children playground, bowling and PlayStation games, traditional game area, swimming pool and cafés. The event building consists of six sub-zones namely hall area, theatre, exhibition, cinemas, shop and cafés. The amenities consists of six sub-zones namely restaurant, shop, renting place, mosque, shower and toilets and clinic. The administration building consists of five sub-zones namely meeting room, different areas of office, resources area, kitchenette and reception. The e-shelter unit consists of three types of sub-zones which are small units for single user, units for small families and units for large families. Table 1 tabulates the major zone of this project.

Site Selection and Analysis

This study proposed two sites for site selection evaluation. According to the space program, the buildings footprint is about 20,400 sq. m and the parking area is about 10,000 sq.m. The site area of the project was determined by taking 40% of the site, which is about 50,000 sq. m. There are two sites were proposed in Khaleej Salman, Jeddah Saudi Arabia as shown in Figure 4. The total site area for site 1 and site 2 are 924,000 sq. m and 218,077 sq. m.

The site selection criteria for this project are wide and new developed urban area, good destination for residents and visitors, linked to full cultural, civic and community potential site as well as nice view of surrounding. For evaluation, the weighting factor of 1 is for not very important, 2 is for somewhat important and 3 is for very important. Table 2 illustrates the site evaluation result of the proposed 2 sites.

Table 1. Major zones

<table>
<thead>
<tr>
<th>Zone Name</th>
<th>Percenta ge (%)</th>
<th>GFA</th>
<th>NET Area</th>
<th>Foot Print</th>
<th>No. of Floor s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity building</td>
<td>22</td>
<td>8800</td>
<td>6600</td>
<td>2.20</td>
<td>4</td>
</tr>
<tr>
<td>Events building</td>
<td>30</td>
<td>1200</td>
<td>9000</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Shelter units</td>
<td>25</td>
<td>1000</td>
<td>7500</td>
<td>10.0</td>
<td>1</td>
</tr>
<tr>
<td>Amenities</td>
<td>10</td>
<td>4000</td>
<td>3000</td>
<td>200</td>
<td>2</td>
</tr>
<tr>
<td>Administration</td>
<td>8</td>
<td>3200</td>
<td>2400</td>
<td>1600</td>
<td>2</td>
</tr>
<tr>
<td>Services</td>
<td>6</td>
<td>2400</td>
<td>1000</td>
<td>2400</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>4040</td>
<td>3030</td>
<td>20,4</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2. Site evaluation result

<table>
<thead>
<tr>
<th>Site criteria</th>
<th>Site 1</th>
<th>Site 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Utilities</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Security and safety</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Visual quality</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Future development</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Demographic pattern</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Surrounding</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>14</td>
</tr>
</tbody>
</table>
Based on the site evaluation result shown in Table 2, the chosen site with the highest score is site 1. The selected site can be accessible from the span of Al-Malik or Al-Madinah road to Al-Malik Saud road. Regarding the climate analysis, the summer temperatures in this site is considered very hot and break the +40°C (104°F) in the afternoon and drop to +30°C (86°F) in the evening. Jeddah is relatively humid, the average daily relative humidity varying between 55% and 70% throughout the year. The relative humidity is lowest during late spring and early summer. The mountains are located at the east of Jeddah and there are some general wind patterns over the Arabic peninsula. Therefore, the predominant winds move parallel to the coast. During May to September the region is subject to a seasonal effect known as ‘Aziz’. This phenomenon is a strong, hot and dry wind that moves from the south-west bringing large quantities of dust and dust storms to the Jeddah region (Figure 5).

Figure 4. The proposed site for the project in Khaleej Salman, Jeddah Saudi Arabia [12]

Figure 5. The wind patterns at the selected site [12]

Figure 6. Final zoning of the project [12]

Figure 7. Bird eye view of the project

Figure 8. Main perspective view of project

Figure 6 and Figure 7 display the final zoning of the project and the bird eye view of the designed building. The small zones such as amenities, outdoor activity and services are sandwiched between the two main zones, which are the event building and activity building. The administration units is located near to the main entrance of the project, also the shelter unit is separated into two zones. Figure 8 demonstrates the main perspective view of project.
CONCLUSION
This study emphasize on the concept of the public beach by proposed a building designed through offering multiple combinations of sports and rest, while being able to enjoy views on the city and its surroundings. The proposed project equipped with several special zones namely activity building, events building, amenities, administration building, shelter unit and services unit. This would be a joyful environment where people can gather for attending an event, concert, exhibition or watching a movie. The selected site for this project is located at Khaleej Salman beach, near to Prince Salmon Palace, also convenient for accessibility. The proposed project at developing khaleej Salman with entertainment public facilities would be a successful project because the place is eligible to be as a tourist place, which will serve the different ages of the family members.

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